



FAA
Air Traffic Organization

Flight Plan Filer Testing for ICAO FPL 2012

Amendment 1 to PANS-ATM

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1. Introduction

1.1 Background

Amendment 1 to the PANS-ATM makes changes to the content and format of the ICAO flight plan (FPL) and associated Air Traffic Management (ATM) messages. These changes will become globally applicable on November 15th, 2012.

To avoid a “big bang” switchover, a transition period between July 1st and November 15th is defined. During this period Air Navigation Service Providers (ANSPs) may accept both the PRESENT and the NEW format. ICAO is maintaining a web site with status information for each Flight Information Region (FIR). In addition, States will publish their transition dates using Aeronautical Information Circulars (AICs) and Notices to Airmen (NOTAMs) as appropriate.

The FAA must deploy revised software for five different Flight Data Processing systems at 23 En Route and Oceanic Air Route Traffic Control Centers (ARTCCs). Two flight services systems, two flight services vendors, and numerous other systems will also be updated. The FAA expects to have all systems updated and ready to accept both PRESENT and NEW format plans in all FIRs by September 15th, 2012.

A number of test opportunities will be provided for flight plan filers to ensure success and minimize problems once NEW plans are to be used in operations. This document details the test opportunities available and the procedures for them.

1.2 Test Objectives

The objectives of flight plan filer testing are to ensure:

1. Flight plan filer and FAA expectations regarding flight plan content are consistent
2. FAA systems process filer flight plans and changes as expected
3. Flight plan filer systems are providing correctly formatted flight plans

1.3 Points of Contact

The point of contact for flight plan filer test registration and questions regarding tests is

Donald Schraub Donald.CTR.Schraub@faa.gov 1-940-845-4896

The point of contact to register for receipt of acknowledgement messages is

Ken Wright Ken.Wright@faa.gov 1-609-485-7930

In addition, for each Testbed test session the FAA will distribute test procedures that will provide a point of contact for test conduct, configuration, and status questions.

1.4 References

1. ICAO information on the Amendment:
<http://www2.icao.int/en/FITS/Pages/Documents.aspx>

2. ICAO status of FIRs:
<http://www2.icao.int/en/FITS/Lists/Current%20FIR%20Status/FPL%20Status%202.aspx>
3. FAA filing guidance:
http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/enroute/flight_plan_filing/General/ICAO_2012/presentations/
4. European region guidance:
http://www.paris.icao.int/documents_open_meetings/files.php?subcategory_id=120
5. Asia-Pacific Region guidance:
http://www.bangkok.icao.int/edocs/FPL_Guidance_ver4.pdf

2. Filer Testing Opportunities and Schedules

Several types of testing will be available leading up to the transition, including

1. Static testing via email.
2. Testing over the Aeronautical Fixed Telecommunications Network (AFTN) to an FAA Testbed.
3. Site testing with individual ARTCCs prior to Transition.
4. Operational Testing during Transition.

2.1 Static Testing

As of February 2012, flight plans can be constructed and sent to the FAA via email for evaluation. The FAA will continue to support this for the duration of the activity until switchover. (See Section 3 for further details.)

2.2 Testbed Tests

Several test periods are being scheduled with a Testbed at the FAA Technical Center in New Jersey. A different system will be connected for each test. Users will access the Testbed via AFTN. The expected schedule is as follows; this schedule will be posted on the FAA ICAO 2012 web page and updated as necessary. (See <http://www.faa.gov/go/fpl2012>) (See Section 4 for further details.)

2.3 Site Tests

As the software is deployed to operational systems, individual systems may enter transition mode for limited periods of time. At those times, a limited number of filers will be invited to file test flight plans or, if feasible, operational flight plans in NEW format. Because the deployment schedule is not yet fixed, the dates for these tests cannot be scheduled until later. (See Section 5 for further details.)

2.4 Transition Tests

When all ARTCCs have the updated software and are ready, the FAA will enter Transition Mode. All users will be notified that they can start using NEW format for transition, if it is suitable for them. Factors for filers will include their readiness, as well as whether all ANSPs filed with are ready. In no case should it be required that a filer send a flight plan to one ANSP in NEW format and to another ANSP in PRESENT format.

In addition, if users are not ready for operations and still require additional testing, some limited tests with the operational systems may be made available during this time period.

The FAA currently anticipates entering Transition Mode by September 15th, 2012. (See Section 6 for further details.)

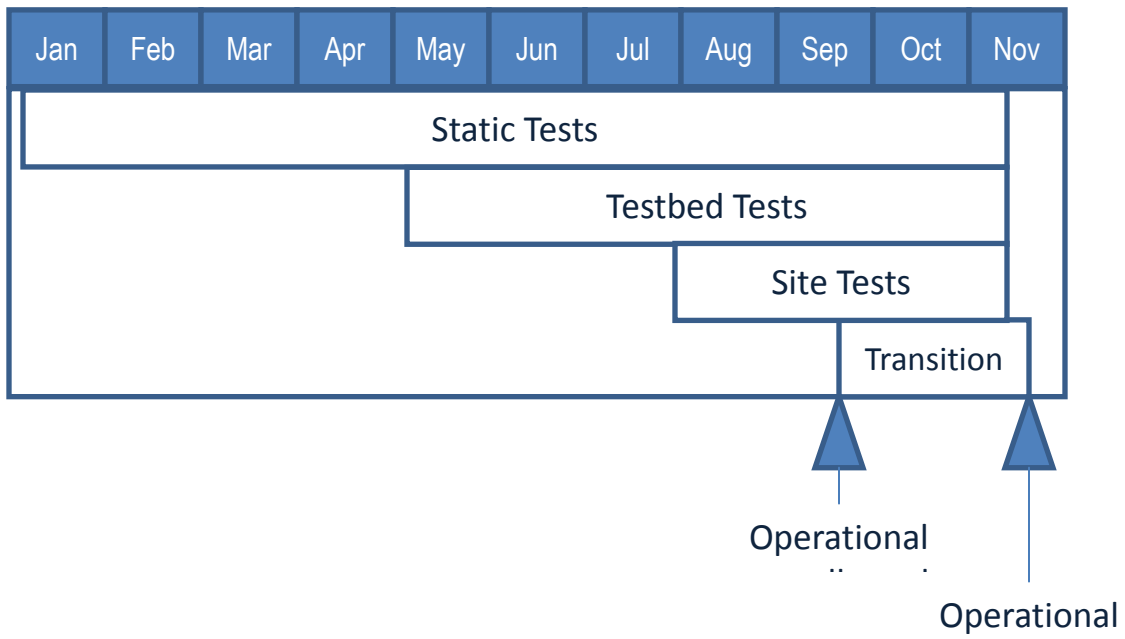


Figure 1. Overview of Schedule

3. Static Testing Procedures

Static testing is relatively informal. To facilitate FAA analysis of the flight plan, the following are recommended:

1. Test your FPL with the Eurocontrol IFPUV, available to all at:
<https://www.public.cfm.eurocontrol.int/PUBPORTAL/gateway/spec/index.html>
 - a. The IFPUV is available under “Flight Planning” on the right side of the Portal web page
 - b. If you do not have a valid EUR route to use, you will likely get a route error- if you do, then the 2012 content is OK (Fields 10 and 18 are verified before the route). The following Fields 13, 15, and 16 should be valid if you prefer to use an FPL that does not get a route error:
-EBCI1300
-N0460F360 CIV UN872 VES UH80 ASPOR
-LPPR0200
2. Remember that the important content is Fields 10 and 18 for NEW content. We recommend sending a flight plan that has all the elements that you would expect to send, but you can send just sample Fields 10 and 18 if you prefer.
3. Please format the FPL as normally formatted per Doc. 4444, i.e. follow the normal line breaks. A typical FPL will appear as follows:
(FPL-N12345-IG
-C172/L-SD/C
-KGAI0710
-N0110A080 DCT EMI DCT
-ZZZZ0119 KEDG
-DEST/MD31)
4. Remember that there are minor changes to the format of CHG, DLA, and CNL. You can send samples of these messages for evaluation as well. Note that the Scenario Guidance also recommends testing these messages with the Testbed.
5. If you have questions on the correct way to file a certain element, include them with the flight plans.
6. Since these flight plans will be analyzed manually, please send a small number of representative plans. We do not have the capability to process large numbers of flight plans by this method.

4. Testbed Testing Procedures

4.1. Purpose. This information has been distributed to flight plan filers and other test participants to provide generic procedures and requirements for the subject testing. Although this testing will be conducted between non-operational systems, connectivity between the test systems will be provided through the operational NADIN/AFTN system. These procedures and requirements have been developed to ensure this non-operational testing does not interfere with or impact any operational facility and to ensure that test messages are not allowed to mix with operational messages at any point.

4.2. General. Procedures contained in this document are the generic procedures to be followed in all lab-to-lab filer testing with the FAA Technical Center for ICAO 2012. Specific guidance will also be provided prior to each test, based on the systems to be tested and the planned Tech Center lab configurations. FAA test personnel will establish a conference bridge at the beginning of each test. This bridge will be available to assist filers with connectivity issues and other questions that arise during testing. Test personnel may not be able to assist with individual flight planning problems during the test, due to workload.

4.2.1. If you would like us to review your test messages prior to a test, you may email your messages to the test coordinator prior to the test (see Static Testing, above). In general, email requests for review of test messages will be answered on a first come, first served basis. We will look for obvious incompatibilities with the NEW 2012 format. If time permits, we may run some of your messages through the computer at the Tech Center. We will then inform you of our findings.

4.2.2. For each test the Tech Center lab will be configured to emulate a single ATC facility. All flight plans must be filed from a departure airport within the facility that is configured. Also, please remember that virtually all of the ICAO 2012 changes affect ICAO Fields 10 and 18. Although you may file and/or amend other fields, we would suggest that you concentrate on these fields to get the most value from the test.

4.3. Procedures. Filers should comply with ALL of the procedures below. If your system will not allow you to comply with any of the following procedures, you should advise the test team at least two working days prior to the test to allow the team to determine if the deviation will impact safety and to make provisions to accommodate the request.

General Testbed Procedures

1. Complete and return the **FLIGHT PLAN FILER TEST REGISTRATION** form to the test coordinator at least two working days prior to the scheduled test.
2. Review the test procedures for the each test. They may vary slightly. Test-specific procedures will be sent to all filers that have registered to test. At a minimum, the test-specific guidance will include
 - the airspace being emulated in the Testbed,
 - sample departure/destination and routes that will work,
 - contact information for the test coordinator
 - details of the test schedule and call-in bridge number
3. Construct flight plans in accordance with the guidance in Section 7.
4. Construct change scenarios in accordance with the guidance in Section 8.
5. Address all test messages to the Tech Center Lab address “KUDSZQZX” only, unless a different address is specified in the Test-specific procedures for the individual test. **Do not** address test messages to any other NADIN/AFTN address, as this may send your message to an operational system.
6. As stated previously, FAA test personnel may not be able to provide assistance with individual messages, due to workload during the test. At the completion of testing you should forward any issues or questions to the test coordinator. We will review and respond to your questions as quickly as we can.

5. Site Testing Procedures

Once the new software has been deployed to operational systems and is tested and ready at a site, some individual systems may declare short periods where testing with the operational system can be done.

If and when this type of testing is performed, a limited number of test participants will be invited to participate. It will be important to limit the number of messages to avoid interference with operations, and we will have to be in constant communication with the filers.

Most of the guidelines for flight plans to the Testbed will be followed. Additional specific requirements will be provided prior to any site test.

6. Transition Testing Procedures

The FAA will notify users when all sites are ready to accept NEW format flight plans. This is currently expected to be on or about September 15th, 2012.

Once all systems are operational, filers may file operational flight plans in either NEW or PRESENT format.

Some limited opportunities to send test flight plans to operational systems may be provided. If there is a need for this, instructions and schedules will be published.

7. Test Flight Plan Requirements

Flight plans sent to the Testbed will still use the Operational AFTN. An addressing error could cause the flight plan to be sent to an operational system. Any test flight plans sent to an operational system obviously must be clearly marked as Tests. Therefore, the following guidelines must be followed:

1. If possible, the callsign should be constructed as follows:
 - a. The letters “TTT” followed by
 - b. Two letters indicating the operator, e.g. “UA” for United Airlines followed by
 - c. Two digits/letters to identify the specific flight plan, e.g. 11
 - d. Ensure the callsign does not exceed 7 characters.
 - e. If you cannot follow these guidelines for callsign, please contact the test coordinator to coordinate the callsign(s) you will use.
2. Insert as the first remark: RMK/TEST DO NOT POST
3. If the callsign for each flight plan submitted is not unique, include a test number in RMK/ to facilitate communication about the plan.
4. Use OPR/, ORGN/ and/or RMK/ to indicate who filed the flight plan and provide contact information.
5. Determine what facility the Testbed is emulating, and ensure each test flight plan departs from an airport in that facility.
 - a. Default Fields 13, 14, and 16 will be provided for use. For ICAO 2012 testing the route is not important, so there is no need to vary the departure/destination/route fields in test flight plans.
6. Address the flight plan only to the test address provided, “KUDSZQZX”, unless a different address is specified in the Test-specific procedures for the individual test. **Do not** include any operational AFTN addresses.

8. Test Scenario Resources

In addition to the FPL message changes, DLA, CHG, and CNL messages are affected: Field 13 EOBT and Field 18 (DOF/ portion) have been added.

Therefore, testing should ideally include these messages as well as FPLs.

The following scenarios are recommended at a minimum:

1. Change the estimated off-block time (also known as proposed departure time) to a later time on the same day. This should normally be done via a DLA message.
2. Change the estimated off-block time to a later time in the next day, but within 23 hours of current time. This should normally be done via a CHG message, especially if DOF/ was filed.
3. Change various fields using a CHG message. Do not remove the RMK/TEST DO NOT POST from the flight plan.
4. Cancel a previously filed flight plan using a CNL message.